

**IN THE CLAIMS:**

Claim 1 (Currently Amended): A method of fabricating a fuel injector comprising:

providing a clean room;

fabricating a fuel group in the clean room, the fuel group including having a generally constant outer diameter between a seat and an armature;

fabricating a power group exterior of the clean room;

inserting the fuel group into the power group; and

fixedly connecting the fuel group to the power group.

Claim 2 (Previously Presented): The method according to claim 6, further comprising, prior to inserting the fuel group into the power group, performing at least one fuel flow tests on the fuel group.

Claim 3 (Original): The method according to claim 2, wherein the at least one fuel flow tests are performed exterior of the clean room.

Claim 4 (Previously Presented): The method according to claim 6, wherein the inserting is performed exterior of the clean room.

Claim 5 (Original): The method according to claim 4, wherein the fixedly connecting is performed exterior of the clean room.

Claim 6 (Currently Amended): A method of fabricating a fuel injector comprising:

providing a clean room;

fabricating a fuel group in the clean room, the fuel group having a generally constant outer diameter between a seat and an armature, and prior to fabricating the fuel group, assembling a fuel tube assembly, the fuel tube assembly including an inlet tube and a non-magnetic shell;

fabricating a power group exterior of the clean room;

inserting the fuel group into the power group; and  
fixedly connecting the fuel group to the power group.

Claim 7 (Original): The method according to claim 6, wherein assembling the fuel tube assembly is performed exterior of the clean room.

Claim 8 (Original): The method according to claim 7, further comprising, after assembling the fuel tube assembly, performing a leak test on the fuel tube assembly.

Claim 9 (Original): The method according to claim 8, further comprising, after performing the leak test, washing the fuel tube assembly.

Claim 10 (Original): The method according to claim 9, further comprising, prior to washing the fuel tube assembly, placing the fuel tube assembly in the clean room.

Claim 11 (Original): The method according to claim 10, further comprising, after washing the fuel tube assembly, inserting a filter into the fuel tube assembly.

Claim 12 (Original): The method according to claim 11, further comprising, after installing the filter, inserting an armature into the fuel tube assembly.

Claim 13 (Previously Presented): The method according to claim 6, wherein inserting the fuel group into the power group is performed exterior of the clean room.

Claim 14 (Original): The method according to claim 13, wherein the non-magnetic shell is inserted into the power group prior to the inlet tube.

Claim 15 (Currently Amended): A method of fabricating a fuel injector comprising:  
providing a clean room;

fabricating a fuel group in the clean room, the fuel group having a generally constant outer diameter between a seat and an armature ;

fabricating a power group exterior of the clean room, the fabricating the power group comprises:

- providing a magnetic housing;
- providing an electro-magnetic solenoid coil; and
- fixedly connecting the magnetic housing to the electro-magnetic solenoid coil;
- inserting the fuel group into the power group; and
- fixedly connecting the fuel group to the power group.

Claim 16 (Original): The method according to claim 15, wherein fabricating the power group further comprises fixedly connecting at least one electrical terminal to the electro-magnetic solenoid coil.

Claim 17 (Original): The method according to claim 16, wherein fabricating the power group further comprises forming a dielectric overmold over at least part of the magnetic housing, the electro-magnetic solenoid coil, and the at least one electrical terminal.

Claim 18 (Previously Presented): The method according to claim 6, wherein inserting the fuel group into the power group is performed exterior of the clean room.

Claim 19 (Original): The method according to claim 18, wherein the fixedly connecting is performed exterior of the clean room.

Claim 20 (Original): The method according to claim 19, wherein the fixedly connecting comprises welding the power group to the fuel group.

Claim 21 (Previously Presented): The method according to claim 6, wherein fabricating the power group comprises:

- providing a magnetic housing;

providing an electro-magnetic solenoid coil; and  
fixedly connecting the magnetic housing to the electro-magnetic solenoid coil.

Claim 22 (Previously Presented): The method according to claim 21, wherein fabricating the power group further comprises fixedly connecting at least one electrical terminal to the electro-magnetic solenoid coil.

Claim 23 (Previously Presented): The method according to claim 22, wherein fabricating the power group further comprises forming a dielectric overmold over at least part of the magnetic housing, the electro-magnetic solenoid coil, and the at least one electrical terminal.

Claim 24 (Previously Presented): The method according to claim 21, wherein inserting the fuel group into the power group is performed exterior of the clean room.

Claim 25 (Previously Presented): The method according to claim 24, wherein the fixedly connecting is performed exterior of the clean room.

Claim 26 (Previously Presented): The method according to claim 25, wherein the fixedly connecting comprises welding the power group to the fuel group.

Claim 27 (Previously Presented): The method according to claim 15, further comprising, prior to inserting the fuel group into the power group, performing at least one fuel flow tests on the fuel group.

Claim 28 (Previously Presented): The method according to claim 27, wherein the at least one fuel flow tests are performed exterior of the clean room.

Claim 29 (Previously Presented): The method according to claim 15, wherein the inserting is performed exterior of the clean room.

Claim 30 (Previously Presented): The method according to claim 29, wherein the fixedly connecting is performed exterior of the clean room.

Claim 31 (Previously Presented): The method according to claim 15, further comprising, prior to fabricating the fuel group, assembling a fuel tube, assembly, the fuel tube assembly including an inlet tube and a non-magnetic shell.

Claim 32 (Previously Presented): The method according to claim 31, wherein assembling the fuel tube assembly is performed exterior of the clean room.

Claim 33 (Previously Presented): The method according to claim 32, further comprising, after assembling the fuel tube assembly, performing a leak test on the fuel tube assembly.

Claim 34 (Previously Presented): The method according to claim 33, further comprising, after performing the leak test, washing the fuel tube assembly.

Claim 35 (Previously Presented): The method according to claim 34, further comprising, prior to washing the fuel tube assembly, placing the fuel tube assembly in the clean room.

Claim 36 (Previously Presented): The method according to claim 10, further comprising, after washing the fuel tube assembly, inserting a filter into the fuel tube assembly.

Claim 37 (Previously Presented): The method according to claim 36, further comprising, after installing the filter, inserting an armature assembly into the fuel tube assembly.

Claim 38 (Presented Previously): The method according to claim 15, wherein inserting the fuel group into the power group is performed exterior of the clean room.

Claim 39 (Previously Presented): The method according to claim 38, wherein the non-magnetic shell is inserted into the power group prior to the inlet tube.